



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,818	01/21/2005	Koji Yamada	12065-0020	2397
22502	7590	12/03/2009	EXAMINER	
CLARK & BRODY			YANG, JIE	
1090 VERNONT AVENUE, NW			ART UNIT	PAPER NUMBER
SUITE 250			1793	
WASHINGTON, DC 20005			MAIL DATE	DELIVERY MODE
			12/03/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/521,818

**Examiner**

JIE YANG

**Applicant(s)**

YAMADA ET AL.

**Art Unit**

1793

**—The MAILING DATE of this communication appears on the cover sheet with the correspondence address —**

THE REPLY FILED **16 November 2009** FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a)  The period for reply expires 3 months from the mailing date of the final rejection.  
 b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
 Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2.  The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a)  They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b)  They raise the issue of new matter (see NOTE below);  
 (c)  They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d)  They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.

6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: \_\_\_\_\_

Claim(s) withdrawn from consideration: \_\_\_\_\_

**AFFIDAVIT OR OTHER EVIDENCE**

8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fail to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
 See Continuation Sheet

12.  Note the attached *Information Disclosure Statement(s)*. (PTO/SB/08) Paper No(s). \_\_\_\_\_

13.  Other: \_\_\_\_\_

/Roy King/  
 Supervisory Patent Examiner, Art Unit 1793

/JIEYANG/

There is no amendment in the instant claims. Claims 1, 3, and 4 remain for examination.

Continuation of 11, does NOT place the application in condition for allowance:

The Applicant's arguments filed on 11/16/2009 with respect to claims 1, 3, and 4 have been fully considered but they are not persuasive.

Applicant's arguments are summarized as follows:

- 1, JP'322 and US'302 do not teach analyzing and sampling of the slag in the furnace.
- 2, The Examiner has committed error in interpreting the copper content of the slag of US'302.
- 3, the cited prior art does not teach the use of granules.
- 4, the combination of US'933 to JP'322 and US'305 lacks the proper reasoning.
- 5, the average grain diameter of the copper source material produced unexpected results to rebut the optimization rejection.

Responses are as follows:

Regarding argument 1, the limitation of "ascertaining a copper content of molten slag in the furnace by sampling and analyzing" in the instant claim 1 does not mean that it must be an "in situ" analysis method because sampling and analyzing can be finished off-site to obtain the composition date of the slag in the furnace. The Examiner notes the Applicant does not provide any evidence to support the "in situ" analyzing and sampling argument.

Regarding the argument 2, the Examiner agrees that the unit of 5.55 Cu in table of col.20 of US'302 is not clear (it may be gram, wt% or g/L), but the Examiner notes that US'302 teaches Cu percentage in slag is typical 0.49wt% and best 0.43wt% (Col.17, table in lines 40-48 of US'302), which is within the 3wt% Cu as recited in the instant claim.

Regarding the arguments 3 and 5, the small granule is one kind of powder. As pointed out in the previous office actions US'305 in view of JP'322 and US'302 teaches the powder size overlapping the claimed average grain diameter of the granules. The Applicant need to provide persuasive evidence to support the argument that "it is better to charge copper oxide granulae of the claimed size...to improve in the copper showering effect".

Regarding the argument 4, As point out in the previous office actions 11/28/2007, 6/5/2008, 12/22/2008, and 8/21/2009, applying a low pressure than atmospheric pressure in a electric furnace is known in the art, which evidenced by US'933. US'933 teaches a method of recovering the variety of metals under vacuum condition and US'933 teaches a vacuum-heating process may be applied to all kinds of waste materials containing a variety of metal, allows recovery of highly pure individual metal components at a high yield, which provide a good motivation to combine US'933 to the process of US'305 in view of JP'322 and US'302.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-2701884. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-2721244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.